

# MAINE FARMER

## AND JOURNAL OF THE USEFUL ARTS.

BY WILLIAM NOYES & CO.]

"OUR HOME, OUR COUNTRY, AND OUR BROTHER MAN."

[E. HOLMES, EDITOR.]

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### THE MAINE FARMER

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### AGRICULTURAL.

From the Quarterly Journal of Agriculture.

#### ON CUTTING GRAIN WITH THE COMMON SCYTHE.

By the Rev. JAMES FARQUHARSON, of Alford.

A gentleman, a member of the Highland Society, usually resident in Edinburgh, having, on a recent visit to this place, witnessed the perfect and expeditious manner in which the grain crops are cut in Aberdeenshire by the scythe, a practice which he had not observed elsewhere, in the course of a pretty extensive journey thro' other parts of Scotland during this harvest; and having expressed an opinion that a notice of the introduction of such a valuable improvement in this district, and a plain description of the manner in which the various operations are performed, and statement of the advantages of the process, might lead to its adoption in other parts, where it is yet unknown, I have, on the suggestion, written out the following account, which I now take the liberty to present to the Highland Society.

The application of the scythe to the cutting of the grain crops first commenced effectively in this neighborhood, which is near the centre of Aberdeenshire, in the year 1818; and the system was so rapidly perfected, apparently by a spontaneous movement among the tenants and laborers over several parishes, that, in the course of three or four years, the sickle, or reaping hook, was in a great measure superseded; and now for several years past it is no where to be seen, the whole crops, even those on the smallest possessions, being cut down with the scythe.

I have heard it reported that the improvement had commenced two or three years earlier about the district of Auchterless; but to the certainty of that matter I cannot speak, nor give any detail of its progress there. I can state, however, that it did not come, in any perfected form, into this immediate neighborhood, from any other quarter, as I have witnessed its rude beginnings here, and its steps from year to year towards perfection, till, in the end, it has become so satisfactory as to deserve the attention of every agriculturist, who sets a value on the despatch, cheapness, perfection, and at the same time pleasantness to the workmen, or the labor he has to per-

form. Perhaps I ought to have commenced with stating, that about thirty years ago an attempt had been made in this parish, and persisted in for two years, to cut the corn crops with the scythe; but as a notion had been then entertained that it was indispensable, for laying the ears even, to attach some sort of additional machinery to the common scythe, and which was attempted in the form of a comb or heckle projecting above the blade, the scheme became abortive, owing, as experience now teaches us, to that very notion; and all thought of employing the scythe for harvest work passed away, till it was again revived at the time above stated.

The implement now employed is just the common scythe, universally in use over the kingdom for cutting grass and clover hay. No change whatever is made in it for cutting heavy or lodged grain crops; but for light standing crops a very simple addition is found of advantage. This consists of a small rod or shoot, nearly an inch in diameter, of green willow, or rowan, or broom, or any other flexible and tough young wood. It has its thick end twisted into the small iron rod, which aids in attaching the blade of the scythe to its handle, named provincially the Grass-nail. Its small end passes over the upper side of the blade as far as the back, where it is bent upwards in an easy curve, and is brought backward and tied with several rounds of strong twine to the handle, about 15 inches above the blade. A piece of strong iron wire is sometimes substituted for the willow rod; but the latter is more approved of, being more easily adjusted to the nature and lay of the crop, according to the judgment of the scythesman.

In cutting, the scythesman makes a long sweep and a broad cut forward with his scythe,\* laying the swathe or cut corn away from the standing corn. The trial has also been made to lay the swathe to the edge of the standing corn, but two inconveniences attend this method: one, that a part of the standing corn is irregularly cut by the blade entering it beyond the swathe; the other, that the gatherer, the nature of whose work will be presently described, is liable to be impeded by grasping parts of the uncut corn along with the swathe, and thus experiences considerable hindrance, and much additional fatigue; yet, as it has the advantage of gathering into the new swathe, by the scythe itself, the straggling ears of the former one, it is sometimes had recourse to on small possessions, where there is not a sufficient number of work-people; but on all the larger farms, which admit of regular bands of scythers, gather-

ers, binders and rakers, being so adjusted in number as to give to every one a reasonable share of work, the swathe is always laid away from the standing crop.

A person unacquainted with the operation, on seeing the first two or three strokes of the scythesman, at the commencement of a new bout or swathe, would be apt to conclude that the corn could not be taken up with any regularity, but that a large proportion of the ears would be reversed, as he will see that immediately on being cut the ears are inclined away from the swathe to the scythesman's right hand.—But the judgment that he would form at this time would be quite erroneous; for, on waiting to see the effect of the succeeding sweeps of the scythe on the part of the corn already cut, he will quickly perceive that under the hands of a skillful scythesman, whom experience has taught to measure the sweeps of his scythe accurately, the whole of the ears in the swathe are, step by step, at every succeeding sweep, turned more and more outward from the standing corn, and at length placed in a position which enables the gatherer to take them up with a sufficient degree of regularity for all practical purposes. It is probably owing to the unavoidable apparent irregularity of the laying of the ears at the first strokes of the scythe that we have been so late in applying that most powerful and efficient implement for the important purposes of the corn harvest.

Every scythesman is attended by a gatherer, and as the gathering is the part of the work that women can best perform the gatherers are generally women. The grain is left by the scythe, having the stems forming an acute angle with the line of the standing corn, the root end of the stems pointing partly backwards and partly inwards towards the uncut part of the field. The gatherer places herself at the root end of the stems, so as to be able to stoop forward nearly in the line in which they are laid, and by a succession of lifts with her hands, placing the corn on the rear over that which is more forward, stepping at the same time towards the right hand herself, she gathers into one heap what she deems sufficient for a sheaf, and having carefully separated it with her right hand from the forward part of the swathe, then makes a band in the ordinary way, of a part of the gathered heap, and lays the heap upon it.

In no branch of agricultural labor—not even in the substitution of the two horse plough for the ten oxen one, or of the threshing machine for the flail—has a more valuable advance been made, within our memory, from an old and inferior system to a new and better one, than in the adoption of the scythe-reaping.

\* The sweep of a good scythesman is from 7 to 8 feet, from his right hand to his left, and his cut forward from 12 to 15 inches, in corn standing nearly fair.



One advantage is found in the expedition with which the work is performed. On my own small farm I employ generally two scythes and seven hands, during the few days the reaping lasts; and on taking careful notes, at various times, of the extent of ground cleared by them in a working day of ten hours, which is the common length of the working day at all sorts of labor here, I have found that it amounts, taking the difficult with the easy crops, to an average of  $2\frac{1}{2}$  Scotch acres. At this rate, ten good hands, the most economical band of reapers, would clear, in ten hours,  $3\frac{3}{4}$  Scotch, or very nearly  $4\frac{1}{2}$  Imperial acres. This is fully more than 20 good sickle reapers could clear; and it is, in point of fact, a calculation among the workmen themselves, received by them all as correct, that they perform with the scythe something more than double the work they could perform with the sickle.

The work is not only thus more expeditiously, but it is also, in every view, much better performed. The straw is cut off much more closely to the ground, and the provision for the cattle in winter, and the means of making a large quantity of manure, are thus greatly augmented. After the rake too, few, or if the work has been carefully performed, we may say, no ears of grain are left abroad. The field is, at least, under equal circumstances, much better cleared of both grain and straw than it is in the ordinary application of the sickle; but in no condition of the crop is the superiority of the scythe more clearly marked than when, from a continuance of wet weather, or any other cause, the grain has become over ripe, and drops out in the handling. It is then that the uniform sweep of the scythe, effecting a motion of the ears only in one direction, and leaving them to follow each other without any violent disentanglement, is found to be greatly less hurtful than the long continued shaking in the hand, and the numerous disentanglements of small parcels from the standing crop, which are unavoidable in cutting with the sickle. A stranger to the process of the scythe always very erroneously objects to it, that the heavy stroke must shake out the grain. He does not reflect that the rapid motion effected by the stroke is confined exclusively to the root end of the straw, and that the ears suffer nothing from it.\*

Another advantage, of which the magnitude can scarcely be believed, excepting by those who have learnt to estimate it by their own experience, is the quickness with which the scythed shock winns (drys or withers) thoroughly, and becomes fit for the stack: a matter of the utmost importance in our unsteady climate. The straws are not crushed, as takes place with the hand in reaping with the sickle, and the sheaf, although not more liable to break out of the band, is more elastic and open to the action of the atmosphere. It is perhaps not too much to say, that a sheaf of equal weight, cut with the scythe, becomes ready for the stack, under equal circumstances of weather, in half the time needed by one cut with the sickle.

The most pleasing advantage is the total

change of the character of the labor, as it effects a larger part of the work people.—The scythesman and the gatherers, including the rakers, deem their work delightful in comparison with the labor of the sickle.

\* Pieces of lodged crops, matted with after growth, are those alone to which the scythe is scarcely applicable.

## THE FARMER.

WINTHROP, FRIDAY MORNING, JULY 25, 1834.

**NORCROSS' DIVING APPARATUS.**—Mr. L. Norcross, of Dixfield, gave us last week an interesting exhibition of his apparatus which enables one to go under water and remain as long as he pleases, in search of any articles at the bottom; and then come up neither wet nor DROWNED. This is effected by means of a dress of cloth saturated with India Rubber, which is put over the body, covering all parts. A large hemlet of lead is put over the head, which rests upon the shoulders and is made tight with the dress. Glass is put in front of the helmet to see through, and two tubes affixed to the top, through which the air circulates. These tubes are of India Rubber cloth or hose, and must of course be long enough to reach from the bottom above the water. To one of them is attached a forcing pump through which air is propelled by some one at the surface; the other lets the air escape, so that there is a constant circulation of fresh air. Mr. Norcross has adopted a peculiarly simple mode of obviating the great pressure of the water in preventing this circulation. A small portion of the tube for the escape or return of the air, is made of leather, and the pressure of the water of course flattens or shuts it together, and thus keeps the air in until the forcing pump throws in sufficient to overcome this pressure, when it passes out. This part, then, acts as a valve. The person therefore is enclosed in an atmosphere, and can breathe, though covered over by "the vasty deep," nearly as well as in the atmosphere. We are aware that many plans have been devised for descending into the water for the purpose of carrying on operations below the surface; but we think this plan an improvement.

Mr. Norcross also invented the process of preparing the India Rubber which he puts on—this may or may not be the same preparation which has heretofore been used; but as those who have used it keep it a secret, credit is not the less due to him for discovering the mode used. As he has spent much time and money in bringing his invention into practical use, and been subject to much trouble for the want of suitable assistance, we hope that he will ultimately be well rewarded for his ingenuity.

**SOWING WINTER WHEAT IN THE SPRING.**—We have received a notice of the experiment of sowing winter wheat in the Spring, and feeding or cutting it down till fall, and harvesting it during the succeeding season. Experi-

ments are now being tried, by an experienced and successful agriculturist, on this point; and we hope hereafter to have a detail of them, with the results. Should this method succeed, it would yield many advantages, besides that of affording this crop earlier. We are exceedingly gratified with the attention which the wheat crop is receiving in Maine. It will assuredly result in great good to the community. It will finally enable us to raise our own bread. It will raise the value of real estate. It will make us independent in the LARDER and in the PURSE. It will enable us to "go ahead" in domestic improvements. It will make us stronger as a State, and happier as a people.

**HAYMAKING.**—Those who have much clover to cut should be careful not to dry it too long. If there is a great burden upon the ground, and if the stalk be large, the leaf and head will be apt, by being exposed too long to the rays of the sun, to become so dry as to fall off and leave the stalk, which without them is almost worthless. The remarks published in our last volume, page 214, should be examined. They have been practiced by many of our readers, and one of them declared the other day that they saved him twenty dollars in the procuring his hay. This process was the following, viz:—to cure the hay in the swathe and the cock. What was mown from sunrise to 11 o'clock, was put into cocks by night, provided the day had been fair, and suffered to lie there until the third day, then opened, turned, and by four o'clock carried into the barn,—or they may stand in the cock over night, opened carefully the next day, and then carried in as soon as it will do, and before the leaf crumbles.

**COMMENCEMENT.**—Commencement at Waterville will be on Wednesday next.—The Societies of the College will celebrate on Tuesday, and an inaugural address will be given by Rev. President Babcock also on Tuesday.

For the Maine Farmer.

### ERROR MAY BE MADE USEFUL.

MR. EDITOR,—To several of your correspondents I, as a constant reader of your paper, am much indebted—they have brought to view new and practical ideas. I am not one of those who suppose they know all that can be known, or that is known by others. Such are above being informed. It is of no use for them to take your paper; they move by tradition and self importance. They calculate not, if they have a cow, for instance, whether she gives good or poor milk; they have not been made acquainted that there is a vast difference in the quality as well as the quantity of milk. They think milk is milk—a cow is a cow, kept poorly or well fed, they cast not the difference,—they know not by figures whether they have one that runs them annually in debt, or not. So with their other animals. Not so with some of those who are your correspondents.—Your Peru writer I am much pleased with—he comes out and gives us the initials of his proper name, and should he at any time advance error, others will show it, and thus the truth will be elicited. And now, Sir, I do hope your readers will take their pens in hand and



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...ge us who read your paper with their ideas;  
...should they advance error they may be use-  
...as some one will no doubt correct it. I  
...ometimes hear a sermon wherein I believe  
...ere is error, still it serves to cause me to  
...arch and find where the error lies, and con-  
...ms me by the search in the opinion that it is  
...oneous, or that I had the error on my side.  
...us I become much better acquainted with  
...e subject, and thus even error has its use.—  
...f course I like the minister none the less, as  
...all improve more or less, provided he gene-  
...lly preaches correctly. If any error shall be  
...covered in this, or any of my scrawls, I shall  
...be obliged to have it pointed out. Brother  
...mers, pray write more, and oblige all the  
...aders of the Farmer, in particular J. R.

**PROPER TIME FOR CUTTING GRAIN.**—We  
...nd an interesting article upon this subject in  
...e Farmers' Register, which details the result  
...f the writer's observation and practice for  
...elve or fourteen years, on an extensive farm.  
...he length of the communication, and our re-  
...icted limits, necessarily limit us to a brief  
...tice of this communication. The writer ad-  
...its, that if we should be sure of good weath-  
...r, it would be best to omit reaping till both  
...rain and straw are ripe; but as this cannot  
...e the case, and as the crop suffers and loses  
...reatly if not cut and secured as soon as it is  
...pe, he is sure that a great saving will be found  
...n reaping wheat as early as the state of the  
...rain will permit. He considers that "wheat  
...fit for the scythe when the grain is in the  
...OUGH STATE—no matter how soft, provided it  
...clear of milk, or when no fluid comes out  
...eparate from the dough, when the grain is  
...ashed between the fingers. But no one  
...quare yard of wheat can be found, in which  
...all the heads have reached this state at one  
...me: and, therefore, when not more than one  
...enth part of the grains contain milk, I think  
...safe to begin to reap." "My green reaping  
...hen first commenced (in 1821) was fully NINE  
...ys earlier than was usual—and it was pro-  
...ounced then that I was destroying my crop,  
...y reaping it so green. My practice is still  
...ndemned by many, who, however, have gra-  
...ually, and perhaps unconsciously, advanced  
...the commencement of their harvests, until they  
...re not more than two or three days behind  
...me." The saving made in one season, by  
...arly reaping, when a long spell of rainy wea-  
...ther followed, which destroyed more than one-  
...half of his neighbor's crops, was enough to pay  
...or all the loss incurred by that plan in twenty  
...ears. The writer does not believe that any  
...thing is lost either in the weight or bulk of  
...rain cut in the dough state; and as to the  
...quality of the grain for making flour, he be-  
...lieves it generally conceded, that the wheat  
...eaped green is best.

The truth of the foregoing remarks is corrob-  
...rated by the opinions and practice of many of  
...ur best farmers. These observations apply  
...qually to other small grains, particularly to  
...ye. The great objection to the practice is,  
...that the grain is not fit to be bound, as it should  
...e to prevent waste and save it from rain, soon  
...fter it is cut. This objection is obviated by  
...making small sheaves, and putting them in  
..."stooks" of about six sheaves each, by setting  
...the stubble ends of the sheaves far enough  
...part to give sufficient base, and letting the  
...heads of all lean together so as to form a point.  
...These throw off a light rain, and will dry as  
...they stand if made wet by heavy rain. When  
...ry they may be put into shocks.

*New York Cultivator.*

**The Royal palm.**—The late Rev Dr Abbot states  
...at the Royal Palm, is one of the most beautiful

trees on the island of Cuba, and from his descrip-  
...tion, is certainly one of the most useful. The  
...surface of the tree is smooth, white and polished  
...as if it had come out of a lathe. It sometimes  
...grows a hundred feet high—the roots are not so  
...big as a finger, are innumerable, and resemble  
...those of the asparagus. It commences at once  
...a full sized trunk, without substance in the inter-  
...ior, though for an inch and a quarter makes the  
...finest boards, and when dry is hard enough to  
...turn a board nail.

#### CELERY.

With the cultivation and uses of this plant most  
...of the farmers of this country are unacquainted.

It is a biennial plant which has long been cul-  
...tivated in gardens, and used, both as a pot herb,  
...and salad plant. It imparts an agreeable flavor  
...to soups, and the leafstalks when rendered white  
...and crisp, by being huddled up with earth are  
...considered by most people, one of the most deli-  
...cious of all salads.

To cultivate celery the seed should be sown  
...early in the spring either in hot beds, or open  
...ground where the plants may be allowed to re-  
...main until the latter part of June, when they  
...should be taken up and transplanted to the rows  
...where they are to remain until taken for use.

Some gardeners prefer picking out the young  
...plants from the seed beds, into nursery beds, in  
...order to increase the quantity of roots, and to pre-  
...vent them from being drawn up, which is a natu-  
...ral consequence when they grow too thick.

**Soil.**—A deep rich soil, which is rather moist  
...and composed of a large proportion of vegetable  
...matter, is the most suitable for celery.

**Preparation.**—Celery is generally planted in  
...trenches which are dug one foot wide, and about  
...eight inches deep, and from three and an half, to  
...four feet between the trenches. Into the bottom  
...of these trenches, should be put fine rotten ma-  
...nure which should be mixed with the earth be-  
...neath by spading, or the trench might be dug six-  
...teen inches deep and filled up half full of fine  
...mould.

**Planting.**—When the trenches are thus prepar-  
...ed let the young plants, after having their roots,  
...and tops properly trimmed, be planted about five  
...inches from each other, after which they should  
...be well watered and a board laid over the trench  
...for a few days to protect them from the rays of  
...the sun.

**Earthing up.**—After the plants have taken root  
...and begin to grow freely, the leaves should be  
...raised with the hand, so as to bring the leaf into  
...an upright position, and the earth brought about  
...them and gently pressed, so as to confine them in  
...that position; this operation should be repeated  
...as often as once in ten days, and at each time the  
...earth should be raised according to the growth of  
...the plant. The object of thus raising the earth is  
...to shut out the rays of light from the leaf stalks,  
...which prevents their becoming green, and tough,  
...for while they remain white, or blanched, as it is  
...called, they are more crisp, and have less of what  
...might be called an herbaceous taste. The desir-  
...able object therefore in raising celery is to have  
...the greatest length, and size, of blanched leaf  
...stalks, without having the plant throw up its seed  
...stem, which sometimes takes place when plants  
...are brought forward too soon in a hot bed.

If plants are properly attended to in this latitude  
...the length of the season for growing, is sufficient  
...to produce blanched stalks about eighteen inches  
...long, which may be called a good crop, as they  
...more frequently fall short of that length, than ex-  
...ceed it.

**Securing for winter use.**—There are various  
...methods for securing celery for the supply of the  
...table during the winter months. Where a family  
...has spare room in the cellar, it may be removed  
...from the garden late in the fall, and planted in a  
...bed of rich garden mold in the cellar where it  
...will be more convenient for use than when left in  
...the ground; but as it is not always the case that  
...families have cellar room to devote to the storage  
...of celery it is more commonly allowed to remain  
...in the place where it grew until wanted for the  
...table. In order to protect it from the frost, it  
...should be covered with straw, which should be  
...placed against the sides of the ridge in an upright  
...position, and the tops so bent over the ridge as to  
...carry off the rain which would otherwise have a

tendency to rot the stalks.—*Goodsell's Genesee  
...Farmer.*

**THE BLACK MANGROVE OF THE WEST IN-  
...DIES.**—The black mangrove, which is called  
...by botanists, *Rhizophora Mangle*, is one of the  
...most singular productions of the vegetable  
...kingdom, in a mechanical point of view, inas-  
...much as it seems designed by Providence, both  
...as a barrier against the inroads of the sea, and  
...as a breeding-cage for innumerable shell-fish,  
...particularly the mangrove-oyster, described in  
...a recent number of 'The Athenæum.' In this  
...instance, nature herself forms props for sup-  
...porting the branches; for the larger boughs  
...of the tree send out, in many places, soft lax  
...threads or strings, which grow rapidly, and,  
...hanging down, soon reach the mud, where they  
...immediately divide or split into roots; and,  
...when these acquire sufficient strength, they  
...nourish the shoots or strings, which, constantly  
...acquiring, by this means, size and firmness, at  
...last form trunks, that prop and support the  
...branches from which they originally protruded.  
...The numerous props make the groves of this  
...tree very entangled, and by detaining the  
...mud and other substances brought down by  
...floods, they, in time, cause the land to gain  
...upon the sea, as is mentioned by Brown in his  
...'Jamaica.'

**MISERIES OF WAR.**—A female was lying on  
...a bed of green silk: under her head was a pil-  
...low of the same material; her right arm had,  
...no doubt cradled her babe, and her left was  
...extended, as though for the purpose of keeping  
...her child close to her. A large shell had per-  
...forated the tiled roof, and having made its way  
...through three floors, had gone through the foot  
...of the bed, and penetrated some depth in the  
...fourth floor. A piece of this shell had gone  
...through the woman's forehead, carrying away  
...a great part of the head, so that her death, ac-  
...cording to the opinion of the medical men who  
...saw her, must have been instantaneous. The  
...lower part of the child's body, from the hips  
...downward, was entirely gone; but, strange to  
...say, its little right hand still held by its moth-  
...er's clothes, which, probably, it had grasped  
...at the first noise of the shell.—[Military Car-  
...reer of an Officer.

**COCHINEAL.**—The *NOPAL*, which produces  
...the cochineal, is a plant, consisting of little  
...stem, but expanding itself into wide thick leaves  
...more or less prickly, according to its different  
...kind; one or two of these leaves being set as  
...one plant, at the distance of three feet square  
...from each other, are inoculated with the coch-  
...ineal, which is an insect, it is the same as if  
...we were to take the blight off an apple or oth-  
...er common tree, and rub a small portion of it  
...on another tree, free from the contagion, when  
...the consequence would be, that the tree so in-  
...oculated, would become covered with the blight;  
...a small quantity of the insects in question, is  
...sufficient for each plant, which, in proportion  
...as it increases its leaves, is sure to be covered  
...with the costly parasite.—When the plant is  
...perfectly saturated, the cochineal is scraped  
...off with great care.

**LUCIFER MATCHES.** We find the following  
...method for making these excellent matches in the  
...last number of the *Mechanics Journal*; perhaps  
...it may be useful to some of our readers:

Take two parts, by weight, of the Sulphuret of  
...Antimony, and one part of the Chlorate of Pot-  
...ash. Grind them both to a fine powder and make  
...them into paste with a solution of Gum. Com-  
...mon brimstone matches are to be dipped into it,  
...and when dry they will inflame by being drawn  
...through a folded piece of sand-paper.



*From the American Traveller.*

### GEOLOGY.

AGRICULTURE and Geology are intimately connected. Upon the skillful management of his soil, depends, of course, the success of the farmer. To possess this skill, he must have some knowledge of the nature of the soil he cultivates. If it is naturally barren, he needs to know what ingredient is wanting to render it fertile, before he can take measures to supply it. If it is naturally fertile, he must know for what vegetable it is best fitted, and what management is required to produce the greatest growth. For the want of a knowledge of the nature of soils, which a few hours would give, thousands of farmers even, in New England, are every year struggling against the laws of vegetation and of nature, and are subjecting themselves and families to a fruitless drudgery, which a little science would enable them to avoid, or at least, to secure from it a moderate compensation, a comfortable living, and a decent education for their children.

But the nature of soils is a prominent subject in the science of Geology; and no subject is more simply or easily learnt. Two substances constitute much the greatest part of all soils. These are sand and clay. Either of these substances of itself, forms a soil perfectly sterile. A proper proportion of both, with other circumstances to favor it, produces a soil permanently fertile. To give the highest degree of fertility to a soil, a small quantity of lime is necessary. These three mineral substances, mixed in various proportions, with the addition of animal and vegetable substances, modified by the subsoil, climate, exposure, &c. are nearly all the circumstances necessary to be taken into account, in ascertaining the nature of soils, and the best method of managing or improving them.

The first step to ascertain the character of a soil, is to examine the rocks in the vicinity.—From these, soils were formed, and of course partake of their character. If the rocks are granite, gneiss or mica slate, the soil surrounding them and formed from them, is silicious, and if the exposure and situation favor it, is light and warm, and fitted for wheat and other grains required to endure the severity of winter. If the rocks are argillite, the surrounding soil partakes more or less of clay, which is more heavy and stiff than a sandy or silicious soil, more retentive of moisture, and of course less liable to be injured by the absence of rain. Soils in the vicinity of lime, are always more or less calcareous, and, more than any others, fitted for wheat and other grains of a similar character.

It is not unfrequently the case, that near a soil rendered too stiff by an excess of clay, is a bed of sand which may be easily applied, not to produce a forced vegetation for a year, as is liable to be the case by the expensive application of vegetable or animal manures, but to render permanent as well as to increase the fertility of the soil.

To a soil rendered sterile by an excess of sand, clay may be applied with equal success. In some instances, two adjoining fields may receive a reciprocal benefit, by an exchange and mixture of their soils. There are, indeed, few farms in New England, to which a knowledge of Geology might not in some way be applied to the advantage of their owners.

How could Agricultural Societies do a more essential service to the cause they have espoused, than by appropriating a portion of their funds to premiums for geological and agricultural surveys, or in some other way to forward the introduction of Geology as a branch of popular education. How can school commit-

tees and teachers take a more direct or efficient measure to raise the character of their schools, than by providing the means for their pupils to learn the elements of this simple and practical science?

### FLOWERS.

The interest which flowers have excited in the breast of man from the earliest ages to the present day, has never been confined to any particular class of society or quarter of the globe. Nature seems to have distributed them over the whole world, to serve as a medicine to the mind, to give cheerfulness to the earth, and to furnish agreeable sensations to its inhabitants.

The savage of the forest, in the joy of his heart binds his brow with the native flowers of the woods whilst a taste for their cultivation increases in every country in proportion as the blessing of civilization extends.

From the humblest cottage enclosure to the most extensive park and grounds, nothing more conspicuously bespeak the good taste of the possessor, than a well cultivated flower garden; and it may very generally be remarked, that when we behold a humble tenement surrounded with ornamental plants, the possessor is a man of correct habits and possesses domestic comforts; whilst on the contrary, a neglected, weed grown garden or its total absence, marks the indolence and unhappy state of those who have been thus neglectful of Flora's favors.

Of all luxurious indulgences, that of flowers is the most innocent. It is productive not only of rational gratifications, but of many advantages of permanent character. Love for a garden has powerful influence in attracting men to their homes, and on this account, every encouragement given to increase a taste for ornamental gardening is additional security for domestic comfort and happiness. It is likewise a recreation which conduces materially to the health, promotes civilization and softens the manners and tempers of men. It creates love for the study of nature, which leads to a contemplation of the mysterious wonders that are displayed in the vegetable world around us, and which cannot be investigated without inclining the mind towards a just estimate of religion, and a knowledge of the narrow limits of our intelligence, when compared with the incomprehensible power of the Creator.

Flowers are of all embellishments the most beautiful, and of all created beings, man alone seems capable of deriving enjoyment from them commences with infancy, remains the delight of youth, increases with our years, and becomes the quiet amusement of our declining days. The infant can no sooner walk than its first employment is to plant a flower in the earth removing it ten times in an hour to wherever the sun seems to shine most favorable. The school boy, in the care of his plot of ground, is relieved of his studies and loses the anxious thought of the home he has left. In manhood our attention is generally demanded by more active duties, or by more imperious and perhaps less innocent occupations; but as age obliges us to retire from public life the love of flowers and the delights of a garden return to sooth the latter period of our life.

To most persons, gardening affords delight as an easy and agreeable occupation; and the flowers they so fondly rear, are cherished from the gratification they afford to the organs of sight & of smell; but to the close observer of nature and the botanist, beauties are unfolded and wonders displayed, that cannot be detected by the careless attention bestowed upon them by the multitude.

In their growth, from the first tender shoots which rise from the earth, through all changes which they undergo to the period of their utmost perfection, he beholds the wonderful works of creative power; he views the bud as it swells, and looks into the expanded blossom, delights in its rich tints and fragrant smell, but above all, he feels a charm in contemplating movements and regulations before which all the combined ingenuity of man dwindles into nothingness.—*Jour. of Health.*

### EARLY ONIONS.

WILLIAM LITTLE, Esq. of Hopkington in this State exhibited to us, on the 18th June instant, an onion, the growth of the present season, the

bulb of which was 1½ inches in diameter, with straight well formed top 18 inches in length. This gentleman informed us, that the bed from which this onion was taken, was sowed on the first day of August last; and that it had not, in any way, been artificially protected through the winter.

This mode, if adopted by the market gardener would be as great advantage, in enabling him to furnish a much earlier supply of this valuable vegetable.—*N. E. Farmer.*

*From the Genesee Farmer.*

### CATTLE—NO. XII.

#### SHORT HORNS—COLLING'S IMPROVED BREED.

After all that has recently appeared in the Farmer, on the subject of improved Short Horn cattle from the pens of Ulmus, Judge Buel, and R., I would almost seem supererogatory in me to attempt any further illustration; but as it seems desirable to make some mention of the breed, for the purpose of completing my service, I will take the liberty to recapitulate in part their statements and make such other additions as may occur to me.

In my last number, I traced the Short Horn through their various changes, to their high state of improvement and excellence as exhibited in the Teeswaters. By a reference to the 33d page of the 4th number of the present volume of the Farmer, and to page 45, No 6, it will be seen, that about the middle of the last century, a Mr. M. bank of Birmingham, became one of the leading breeders and improvers of the Teeswater cattle after the cross with the Alderney cattle had become consummated. His stock was doubtless among the most valuable of the Teeswater breed, and became one branch of the progenitors of Colling's breed. Sir William St. Quintin had previously to this time crossed the Teeswater cattle with an improved Dutch variety, and obtained considerable advantage from it; and from his stock was descended another branch of the line of Colling's breed.

According to the account given by the Rev. Henry Berry, the bull Hubback may be considered as the first distinct progenitor of the Colling breed and was from the stock of Sir Wm. St. Quintin, though so remote as almost to have lost the Teeswater character. Hubback was the sire of the dam of Mr Colling's bull Foljambe,\* who was the sire of both the sire and dam of Favorite. Favorite was the sire of the celebrated "Durham ox," which is mentioned on page 33, as above alluded to. This ox brought Mr. Colling's stock into general notice, and gave rise to the appellation of "Durham Short Horns," as applied to the improved breed, though that ox was not what is now meant by "improved Short Horns."

On page 33 of this volume of the Farmer, it is stated that "Mr C. Colling's bull Bolingbroke was put to a red Polled Galloway cow, and the produce being a bull calf, was in due time put to Joana, a pure Short Horn, (Teeswater, descended from Hubback,) she also produced a bull calf. This grandson of Bolingbroke, was the sire of the cow Lady, by another pure Short Horn cow, and from Lady has sprung the highly valuable family of "improved Short Horns," or Colling's improved breed.

But the mother of Lady, which was put to the grandson of Bolingbroke as here stated, was also the mother of the bull Favorite above alluded to, so that Hubback was the great grand sire of both these celebrated animals, and it is probable that the merit of Lady and her descendants is mainly to be attributed to the blood of Hubback and the Galloway cow. How Mr C. Colling came into possession of Hubback, the following account given by Mr Waistell, a friend of Colling's, will explain:

"Mr Waistell used to admire this calf as he rode almost daily by the meadow in which it grazed; and at length he attempted to purchase it from the owner. The price asked, £1., seemed much for a calf not a year old; and the reputation of the Short Horns not being yet established, the bargain was not struck. Still he longed for the young beast, and happening to meet Mr Robert Colling near the place, he asked his opinion

\*The sire of Foljambe was from the stock of Mr M. bank thus uniting the two stocks.



the animal. Mr. Colling acknowledged that there were some good points about him; but there was something in his manner of acknowledging this which induced Mr. Waitzell to suspect that Mr. Colling thought somewhat more highly of the calf than his language expressed, and therefore he hastened next morning, concluded the bargain, and paid the money. He had scarcely done so, before Mr R. Colling arrived for the same purpose, and as the two farmers rode home together they agreed it should be a joint speculation.

"Some months past by, and either Mr Waitzell's admiration cooled, or his partner did not express himself very warmly about the excellencies of the animal, and Messrs Waitzell & R. Colling sold young Hubback to Mr C. Colling, who with the quick eye of an experienced breeder saw the value of the little beast."

It will be recollected, that the characteristics of the original Short Horns were extreme coarseness in form and flesh. In process of time, these qualities became vastly improved by various crossings and selections, until they exhibit in the Teeswaters and Holderness the superior excellencies of early maturity, great aptitude to fatten, extraordinary bulk, and abundance of milk. Here was certainly excellent materials for a skillful breeder to build upon, and it is not surprising that a man of Mr C. Colling's sagacity, should readily mould them into a new and more valuable combination. But still they had defects; their flesh was comparatively coarse, their frame bulky, and offal large while their milk, though abundant was thin and watery. It was Mr Colling's ambition and good fortune to remedy in part these defects, without impairing their established excellencies; and it is to his superior judgment and skill in selecting and crossing and combining these various materials, that we are now indebted for "Colling's improved Short Horns."

By taking the most perfect of the Teeswaters and crossing them with the small boned, round barrelled, fine fleshed Galloways, and from their product selecting the most perfect animals, Mr. Colling was enabled to establish a breed which has combined more excellencies than any other breed of cattle now known. But after all they are still defective in many particulars, and it is to be hoped, that among the many opulent and talented gentlemen who are engaged in breeding these animals, some still more fortunate crosses and selections may be made.

The characteristic points of Colling's improved breed, I have no where seen particularized; but so far as the cows are concerned, they will not differ essentially from the description given on page 34 of this volume of the Farmer. There are some doggel lines, however, in the Farmer's Series of Useful Knowledge, which are not inapplicable to these cows, and I will therefore take the liberty to transcribe them:

"She's long in her face, she's fine in her horn,  
She'll quickly get fat without cake or corn;  
She's clean in her jaws, and full in her chine,  
She's heavy in flank, and wide in her loin."

"She's broad in her ribs, and long in her rump,  
A straight and flat back, without even a bump;  
She's wide in her hips, and calm in her eyes,  
She's fine in her shoulders, and thin in her thighs."

"She's light in her neck, and small in her tail.  
She's wide in her breast, and good at the pail;  
She's fine in her bone, and silky of skin—  
She's a grazier's without and a butcher's within."

As "Colling's improved breed" was the result of a particular cross, and not the improvement of a breed, it will readily be perceived, that to obtain this blood pure, especial reference must be had to PEDIGREE. Hence the propriety of R.'s remarks on this subject in No 10 of the present volume of the Farmer.

In England no beast is considered genuine, or entitled to the appellation of "improved Short Horn," unless his pedigree can be traced through the 'Herd book' to the blood of Hubback. Hence the various devices and tricks, which are practiced by those possessed of good animals of the Short Horn breed, to palm them off as "Colling's improved animals." Too much caution therefore cannot be observed by those wishing to possess the genuine breed, in the selection and purchase of their stock.

In summing up the history and character of

this breed, it may be well to recapitulate in part its leading features.

It will be recollected that the English Short Horns were descended from the Dutch, a coarse, heavy, uncouth breed, but good milkers. After becoming acclimated, they passed through various grades of excellence, under the names of Lincoln Durham, Teeswater, Holderness and Yorkshires at the same time retaining, more or less, their original characteristics. Their characteristics were, first—coarseness; second—aptitude to fatten; third—early maturity; fourth—large bulk; fifth—large offal; and sixth—a profusion of milk. Here Mr C. Colling found them, and upon this basis, commenced his superstructure of "Colling's improved breed." His object was, to get rid of the bad points and preserve the good ones. He therefore bent his efforts to diminish not only coarseness but bulk and offal. The result proved not only his sound judgment, but his great skill as a breeder. By first selecting the bull Hubback, and then re-selecting and crossing with the Galloway cow he obtained a consummation so devoutly to be wished.

His breed then presented the following characteristics. A medium flesh as to fineness, and beautifully marbled, though tending to a preponderance of fat; great aptitude to fatten; early maturity; moderate size, though larger than most other breeds; smaller offal; and generally a large quantity of milk, but not always of the best quality. With these excellencies, variously modified by climate, soil and herbage, they are undergoing and producing innumerable changes, throughout the civilized world.

How far "Colling's improved breed," may be considered permanent I am not prepared to say. The Rev Henry Berry thinks the leading characteristics of the breed have passed through such a long time of ancestry, that there is little danger of deterioration, even in the "improved Short Horns;" but if I was to hazard an opinion to the subject, I should be apprehensive that the system of breeding 'in and in,' which must be resorted to, to keep the blood pure, would finally result in its total subversion, as in the case of the Bakewellian Long Horns.

There can be no doubt however but that the introduction of this breed, and of the Short Horns generally into the United States, will prove of immense advantage to the country; but whether by supplanting our native breeds, or by crossing them and thereby imparting new properties, or by exciting our farmers to an improvement of their own native herds, is a matter of great doubt. Time and experience can alone test that question. But whatever may be the result, one thing is certain, that unless our farmers arouse to the subject of improvement, and adopt some course which will give a new aspect to the cattle of our country, we may bid a long farewell to betterment and to profit!

But we trust there is already a better state of feeling abroad in our country, and a more enlightened zeal among our agriculturists, which will ere long place the AMERICAN FARMERS upon that exalted pre-eminence for scientific research and experimental knowledge, to which their extended opportunities and great privileges so justly entitle them.

QUERCUS.

#### EXPERIMENTS WITH MANURE.

Arthur Young took five equal portions of a field, one portion of which he manured with dry cut straw; a second with straw soaked five hours in fresh urine; a third with straw soaked in like manner fifteen hours; a fourth with straw soaked three days; and to the fifth portion he applied nothing. The whole was filled alike and sown with grain. The product, in grain, of the first was thirty-nine, of the second fifty, of the third sixty-three, of the fourth one hundred and twenty-six, and of the undunged portion nine. In weight of grain and straw, the products of the several portions, in the order above named, were found to be, 100, 120, 130, 300, and 48. This experiment affords a pretty conclusive demonstration of the value of vegetable matter as food for plants, and particularly of the fertility imparted by the urine

of animals, which latter, to us, is generally lost to all useful purposes. It indicates the propriety of so constructing our cattle yards and stable floorings as to concentrate this liquid; and, where there is no cistern to retain it, of applying straw and other litter to absorb it ere it is wasted. Another fact is worth noting; the rotting process took place wholly in the soil;—the fertility was induced by long manure, and the liquids which it held, and not by much.

## MECHANICS.

### MECHANICAL IMPROVEMENTS.

Extract from Dr. J. K. Mitchell's recent Lecture to his Course of Practical Chemistry.

It is only for the want of the SPIRIT, not the genius of Davy or Franklin, that the career of improvement is not ten times as rapid as it has hitherto been. No doubt thousands of valuable facts are observed, wondered at, and forgotten, without a single effort to draw them into the service of society. This is rendered clearer by the truth, that the most important improvements in the arts have been made by those who have pursued avocations remote from the business into which these improvements have been introduced, and who had of course little opportunity for observation or example. Arkwright the inventor of the spinning jenny, was a barber; and Watt the immortal author of the present steam-engine, was a philosophical instrument maker. Papin, who invented the digester and safety valve, was a doctor of medicine; Savery, who produced the first steam engine, was commissioner of sick and wounded soldiers; Newcomen and Cawley, authors of the atmospheric engine, were, the one an iron-monger, and the other a glazier. The inventor of the air pump, Otto de Guericke, was burgomaster of Magdeburg. The projector of that invaluable instrument, the mariner's compass, was John di Gioja, a nobleman of Amalphi in the kingdom of Naples. Fahrenheit, who first applied mercury to thermometric uses, was a bankrupt merchant. Ferguson, the astronomer, was a shepherd, and afterwards a miniature painter; Godfrey, of quadrant fame, was a common glazier; and Dr. Priestly, the great mineralogist Hany, and Cartwright, who invented the power-loom, were clergymen.—Rittenhouse was a farmer, and entirely a self-taught mechanic; Franklin was at first a tallow chandler, and subsequently a printer; and Fulton a portrait painter. John Hunter, who created a new era in surgery, commenced life as a cabinet maker. The greatest engineers whom the world ever saw are Rennie and Telford. To them is Great Britain indebted for a greater amount of her present prosperity than perhaps to any other individuals living. Yet these men were common stone-cutters, both of them educated to the manual labor of dressing stones. The last of the great inventions in steam machinery, is that which enables steam to propel locomotives on common roads. The credit of this invaluable discovery belongs to a practitioner of medicine, and a chemist of Cornwall, in England. Dr. Gurney has already acquired distinction by bringing his fine conceptions into useful action, but when we look forward to the time, which will assuredly come, when the traveller and his goods will be conveyed by land, with as much ease, and with more safety, than at present by water; when we perceive that roads may be made in almost every direction, and in adequate numbers, we shall have a better estimation of the magnitude, and momentous character of the experiments to which, alone, unaided, and under every dis-



couragement, this second Fulton resolutely and confidently appealed.

This very generation will do him full justice, for, in a very few years, horses will nearly disappear from our great roads, and almost every one will travel by steam. Scarcely one of the many surprising and beautiful inventions of the prolific genius of New England, has been made by those practically familiar with the art to which it is auxiliary. The reason of this apparent paradox seems to me obvious. Even here, in intellectual New England, where all else is philosophy, a trade is taught practically, and solely so. It is carefully divested of philosophy, and is made, as far as possible, merely mechanical. There is a dull routine through which every apprentice travels to the station of a journeyman. The less he thinks, the more he will work, and the more immediately profitable will be his labor. When once the circle has been completed, its dull, unvarying round is again and again traversed, until a deviation would be irksome. A man thus trained to the habitual exclusion of curiosity and understanding, although he may make a very good thinker in other matters, cannot readily apply his reason to the familiar labors of his vocation.—When very young, I had occasion to observe the labors of a very sensible man, who pursued the business of a carpenter. At that time he was frequently employed in sawing out square apertures in boards, and always bored three holes at the points where were to be placed three angles of the square. These auger-holes were made for the introduction of a saw. I immediately perceived that two auger-holes would suffice, and enquired how many holes were necessary to effect his purpose. Instantly, ay INSTANTLY, he saw that two were as good as three, and with a sigh, lamented that, AS HE HAD BEEN TAUGHT, he had bored thousands of unnecessary holes, and wasted much valuable time.

The absence of philosophical curiosity and spirit, prevents, not only the proper use of new facts elicited by accident, but the scientific deductions, by which important novelties may be indefinitely increased. A merely practical acquaintance with a trade renders one insensible to its defects, and ignorant of its capacities of improvement. A merely theoretic cultivation of it, encourages impracticable speculations, and hinders us from carrying even beneficial suggestions into useful operation. Hence the most advantageous position in which a mechanic can be placed, is that which combines knowledge of principle, and familiarity with practical detail; intellectual comprehension, and manual dexterity; the power to conceive, and the ability to execute. But to reach this enviable condition, he must take care to think, as well as work, and never suffer any process to pass, without considering it as a philosophical experiment, illustrative of some general principle; for such is in truth every act of mechanical labor.

Nor should he remain satisfied with any thing, merely because it is the practice of others, and take it for granted, that any process is as perfect as it may be rendered. I believe that discoveries have been very frequently postponed by the neglect to ask the simple question, "Is this instrument or this process as perfect as it can be made?" It is not so much the want of talent, as of the spirit of inquiry, that has retarded so frequently the progress of improvement. Of this we have many remarkable proofs. When Arkwright practiced the trade of a barber, he formed an acquaintance with a neighboring spinner, who had DISCOVERED A WANT. It was the want of machinery with which to spin cotton. That suggestion

induced Arkwright to go to work on the subject, and he soon supplied the want, accumulated a fortune, became a baronet and high sheriff of an English county. A conversation relative to the discovery of Arkwright taking place in the presence of a clergyman of the name of Cartwright, one of the party said, "We now want an invention by which we can weave without hand." Cartwright had never seen a loom, but resolved to discover a method of weaving by water or steam. In this, he so well succeeded, as to receive from the British parliament, for the invention of the power-loom, nearly fifty thousand dollars. When Sir Humphrey Davy published his expensive and imperfect method of obtaining potassium, Guy Lussac and Thenard perceived the want of a better method, and instantly devised the one which is now used.—*National Gazette.*

**CAPACITY OF BODIES FOR WATER.**—As it may be interesting to many to know the comparative as well as the positive absorption of water by various bodies, we subjoin the following table, the details of which were made with care. The weight of each substance was ascertained before immersion; next, when the water ceased running and began to drop; and, lastly, when all dropping had ceased, and the bodies were in that state in which they may be supposed to be full of moisture.

	Dry.	Dripping.	Done Dripping.
Flannel	144 grs.	1553 grs.	700 grs.
Woollen Cloth	56 "	370 "	191 "
Linen	875 "	2110 "	1050 "
Calico	115 "	1150 "	450 "
Cambric Muslin	95 "	883 "	307 "
Very fine do.	54 "	715 "	297 "
Glove Leather	196 "	1170 "	677 "
Kid do.	172 "	770 "	421 "
Shoe do.	95 "	194 "	177 "
Sponge	185 "	2440 "	2070 "

From these data the following table may be constructed, to show, in the first instance, the absorbing powers, and, in the second place, the retaining powers, for moisture, of the various bodies thus experimented upon:

	Flannel absorbed 11 & retained 5 times its weight of water.	
Woollen Cloth	6 1-2 "	3 1-2 "
Linen Cloth	5 2-3 "	3 "
Calico	10 "	4 "
Cambric Muslin	9 "	3 1-8 "
Fine Muslin	13 "	5 "
Glove Leather	11 "	6 1-8 "
Kid do.	4 1-2 "	2 1-2 "
Shoe do.	2 "	2 less a fraction
Sponge	18 "	11 "

From these results, it may be seen that although some substances, in the first instance, take up an equal or nearly an equal quantity of water with the sponge, such as the flannel, fine muslin, and glove leather, yet their powers of retaining the same are very far inferior.

#### SUMMARY.

The weather continues remarkably warm, and vegetation was never more rapid. During the last fortnight, there have been but few days that the thermometer did not rise above 85, and on several it has been from 90 to 95. Our farmers are engaged with their whole force in securing their hay crop, which is one of the largest ever gathered in this vicinity; and thus far the weather has been favorable for making it.

[Worcester Spy.]

**Boston Farm School.**—We learn from a gentleman who has recently visited Thompson's Island, where the Farm School and Boys' Asylum is to be located, that the spacious building contemplated for that Institution is so far advanced that the roof will be closed within a few days—and the whole building and accommodations will be completed with all convenient despatch. The House is placed in an elevated situation, and may be seen by all who pass in the harbor, particularly by those passing in the Hingham Steam boat.

[Mercantile Journal.]

**A long settled Pastor.**—The Rev. Dr. Perkins, of West Hartford, Ct. who is now in his 86th year, has been settled in that place 62 years. In a recent discourse he stated, that he had preached 4000 written and 3000 extemporaneous sermons. He was graduated at Princeton in 1769, and was a classmate of Thomas Jefferson.

**Commencement at Waterville.**—Kennebec will hold out many temptations to visitors, (says the Portland Advertiser) the last of this month. In addition to the beauties of the scenery on that fine river at this season of the year, and the State Convention at Augusta on the 31st—the annual Commencement at Waterville College will be holden on Wednesday, 30th.

The Inauguration of Rev. President Babcock will take place on the day preceeding at 4 o'clock P. M.

The anniversary of the Peace Society will be held at 2 o'clock on Tuesday—Oration by Rev J. O. Choules, of New Bedford, Mass.

The Literary Fraternity will celebrate their anniversary at half past 7 o'clock Tuesday evening.—Oration by F. Bradford, Esq. Poem by Win Cutter Esq. of this city.

We are requested to say the regular examination of candidates for admission will be Tuesday morning. Those who prefer may be examined at the close of the vacation ensuing. Still a large class are expected, and those first examined have the preference in the assignment of rooms, it will be desirable for all that can conveniently, to attend the regular examination on Tuesday.

#### FROM EUROPE.

**LONDON, June 4.**—We yesterday announced the important fact of the final submission of Don Miguel to the superior good fortune of his brother—his departure from Portugal, and the termination, of the miserable civil war by which that country has been so long torn. We are now able from intermediate *Chronicles*, to supply some particulars of the occurrences which proceeded the last surrender, and which were necessary to complete the narrative between the great overthrow near Thomar, reported on Monday last, and the present time. It appears, then, that after evacuating Santarem, Don Miguel, with 7000 or 8000 followers, in a completely disorganized and dispirited state, crossed the Tagus to the southern side, taking the rather circuitous rout of Evora for Elvas. At every step, however, his force became more weakened by desertion or fatigue, but chiefly from the former cause; and pressed by the victorious army in the rear, while another marched from Montemor to cut him off from the sea, Miguel at last saw no prospect of safety but in an armistice.

A flag of truce was accordingly sent to Marshal Saldanha, who having no instructions, could give no other answer than that he would immediately send off the proposal by express, to Lisbon. There it was instantaneously repudiated, and the Marshal himself was reproved for being weak enough, to listen to any offer of compromise, and for being disobedient to orders for arresting, even for a moment, the onward march of his troops. It is said that one of the conditions proposed by Miguel was, that all his creatures should be continued in the places which they then held; which was, of course, not listened to for a moment. Eventually he surrendered at discretion, and appears to have been thankful for the only terms conceded to him by the Pedroites, of shipping himself from the Peninsula without delay. He chose, as we have already stated, a port in the Algraves, at which to embark, and the refuge of an English ship of war, in which he is already upon his way to this country.

Havre papers of June 8th have been received at New York by the Francis Depau. We have received our files of Paris papers up to the 7th, but find in them little intelligence of interest.

The French Government had received the ratifications, by the three other powers, of the treaty of the 22 April, which were exchanged in London on the 31st of May. The great object of this treaty has been accomplished by recent events in Portugal.

It is stated in the German papers, that overtures for a general Congress have been made by the King of the French to the several Courts of Europe, and that Aix-la-Chapelle will probably be selected as the place of meeting.

The Commission appointed by the Chamber of Peers to conduct the proceedings against the individuals engaged in the riots of April, had been in session about fifty days, and had nearly completed their labors.

There is nothing later from Portugal. The



Journal Des Debats says, that Don Carlos accompanied Don Miguel on board an English vessel of war; but it was not known, whether he would be at liberty to embark, or whether he would be detained, until instructions could be received from the Spanish Government.

The Pope has addressed a letter to President Boyer, of Hayti, commending him for his attention to the interests of the Catholic Church, which is the established religion of that island.

The Lyons paper of May 18th observes that there were no demands in silks from the U. States.

DANBURY, July 2.

We are informed that a young man was arrested a week or two since, in the lower part of this County, on a charge of poisoning his wife, by administering arsenic to her in pills. She had been somewhat unwell for several days, and he persuaded her to take some pills, which he told her he had procured of a physician. She grew worse immediately after taking them, and was a corpse before the next morning! Her body was opened and the appearances of arsenic, it is said, were discovered on the coat of the stomach. We understand the young man has acknowledged his guilt, and assigned as a reason for committing the unnatural crime, that they could not live together on terms of peace and friendship, and therefore he thought it best to put an end to her life. They had been married only about six months.—Gaz.

**Painful Occurrences.**—On Tuesday last, the lady of Admiral Vansittart died at Saratoga Springs after an illness of a few hours. At the time, her son and two daughters were with her. The Admiral had preceded his family to his new location, at Upper Canada. On the 4th of July, Mr. Wm. Cook, a respectable merchant of Albany, died while eating at the dinner table. On the same day, Eliakim Barker and a Mr Soper, were dreadfully wounded by the discharge of a cannon with which they were firing a salute. Mr. Barker had one arm blown off, and received a wound in his side. Mr Soper had one hand blown off above his wrist and the other near his elbow.

**Manly Confession.**—A member of the Temperance Convention at Utica, related to me the following anecdote:—"Several years since I was in business at Albany as grocer. One evening a man arrived from the country with four barrels of whiskey which he sold me at the customary price, I think some less than thirty cents per gallon, and wished to get a hoghead of Jamaica rum to take back with him. I told him that I had not the rum on hand, but was expecting every hour to receive some from New York, and if he would wait till the next day, I would supply him to which he assented. I had the whiskey rolled into the cellar, transferred into an old rum hoghead, and manufactured, and on the following day sold it to the same man I had bought it of, at an advance of about 75 cts. per gallon."

The utmost reliance may be placed on this statement, and as it evinces a willingness to make all the atonement the nature of the case admits, we wish there were many more to intimate this example of leaving the business and making a confession.—Tem. Rec.

BRIGHTON MARKET—MONDAY, July 14.

(Reported for the Boston Daily Advertiser & Patriot. At Market this day, 315 Beef Cattle, 20 Cows & Calves, 2850 Sheep and 150 Swine. About 150 beef cattle remain unsold.

**PRICES.** Beef Cattle.—Dull, and prices much reduced; we quote prime at 5 25 a 5 50, good a 4 75 a 5; thin at 4 a 4 50.

**Cows and Calves.**—We noticed sales at 20, 22, 25, 26 1-2, 30, 32 and \$35.

**Sheep.**—Lots taken at 1 33, 1 42, 1 50, 1 71, 1 75, 2 2 17, 2 25, 2 33 and 2 37. Wethers at 3, and 3 25.

**Swine.**—All were sold in one lot for 6 3-4 cents; a part of which were very small; at retail, 6 for Sows and 7 for barrows.

## DEATHS.

In Bath, on Sunday morning, 20th inst. Doct. Thomas D. Raeburn, a celebrated Surgeon, aged 38.  
In Litchfield, Mr Harvey B. Jewell, aged 21.  
In Thomaston, Mr Joshua Jordan.  
In New Sharon, 14th ult. Mrs Eunice, wife of Philip Richardson, aged 29.

## MARRIAGES.

In North Yarmouth, Mr Dennis Higgins to Miss Ase-nath B. Harris.  
In Pownal, Mr Jeremiah Mitchell of Cumberland, to Miss Mary Paine of P.  
In Lincolnville, Rev. John N. Rines to Miss Mercy D. Pease of Hope.

**For One Day only,  
AND POSITIVELY NO LONGER.**



**THE MENAGERIE OF  
WARING, TUFTS, & CO.**

**THE** Proprietors most respectfully inform the citizens of Winthrop and its vicinity, that they will exhibit their splendid collection of living animals near Coolidge's Hotel, on SATURDAY August 2d.

Admittance 25 cents.—Children under 10 years of age half price.

The Managers feel great confidence in saying, that they have the most extensive and choice collection of **WILD ANIMALS** ever offered in the United States. They have spared no pains or expense in fitting up their establishment and pledge themselves that it shall be conducted in the most respectable and orderly manner, and every exertion used to render it worthy of public patronage.

To render it still more worthy of public patronage, the Proprietors have engaged the celebrated

## BOSTON MILITARY BAND

Composed of 13 MEMBERS of approved musical taste and execution. No expense has been spared in procuring the most talented and scientific performers, and they challenge any exhibition in the country to produce another of equal talents under a forfeiture of \$500. This **TRAVELING MENAGERIE** is drawn by 45 splendid **GREY HORSES**, and requires the services of 30 men to complete its operations.

AMONG THE ANIMALS ARE THE FOLLOWING:

**The GREAT INDIA ELEPHANT**,—SIAM, Being 10 feet high and weighing 10,000 lbs., was imported into Boston from Calcutta: the Proprietors challenge any Company in the United States to produce his equal.

## AFRICAN LION!!

Being the largest animal of his species in the country, and is judged to weigh 700 lbs. The Proprietors bid defiance to the world to produce his superior, under a forfeiture of \$1000

## TAPIR,

A very singular and interesting animal, from South America, and the only living one in the United States.

## ASIATIC LIONESS,

Being similar in form to the Lion, except the Lioness has no mane.

The **KANGAROO** of New Holland.

## ROYAL BENGAL TIGER,

From Exeter Change, London, which was landed in New York on the 25th of April, 1833. The Arabian CAMEL—a pair of Brazilian Tigers, male and female—the African Spotted PANTHER—a beautiful Hunting LEOPARD—spotted HYENA or TIGER WOLF—the MARGAY or TIGER CAT—the LAMA or GUANICUS of PERU—the South American PANTHER, from the Banks of the Amazon. This ferocious animal is a complete terror to the country it inhabits.

The Polar or Great white Bear—Ichneumons from Europe—Moco from India, an animal not described in history—the North American Catamount, taken on the west side of the Rocky Mountains. A full grown BUFFALO.

**DANDY JACK** on his small Shetland Pony—Apes, Monkeys, and Baboons, together with a number of animals not expressed in the bills.

Mr FLINT, the keeper of the animals, will enter the cage with the LION at 4 o'clock, P. M.

showing the subjection to which this animal of superior strength is brought.

Seats will be erected for the accommodation of 500 persons. The animals will be fed at 4 P. M.

With a view to increase the attraction of the exhibition a large and **SPLENDID INDIA SADDLE**, with appropriate decorations, has been made for the Elephant, by which means Ladies and Gentlemen who visit the exhibition can enjoy in perfect security, a jovial ride upon the Elephant, in the style of eastern magnificence, of which we have all read but never realized.

A large collection of **WAX FIGURES** will be exhibited at **COOLIDGE'S HOTEL** on the same day and evening.—Admittance 12 1/2 cents.

## A CARD.

Messrs. **WARING, TUFTS & Co.** have the pleasure of announcing to the citizens of **WINTHROP** that they have just received in addition to their former very extensive collection of **Wild Beasts**, the following animals, which will be exhibited in the Menagerie without additional charge.

The Oriental Porcupine of Persia—the Jackal or Lion's Provider—the Romper or Man-Eater.

Hours of exhibition from 1 to 5 P. M.

The above Exhibition will be exhibited at Waterville July 30th, Dow's Hotel. Also at Augusta July 31st, at Dillingham's Hotel. Also at Hallowell August 1st, at Additon's Hotel.

## Dissolution of Copartnership.

**THE** Copartnership heretofore existing under the firm of **WHITE & WILLIAMS** is this day by mutual consent dissolved. All persons indebted to the late firm are requested to make immediate payment to **E. WILLIAMS**, who is duly authorized to settle the same.

**GREENLIEF WHITE.  
EDWARD WILLIAMS.**

Augusta, July 12, 1834

## FASHIONABLE TAILORING.

**THE** Copartnership heretofore existing under the firm of **PRESCOTT & DEALY** having been dissolved, the subscriber would respectfully inform the inhabitants of Winthrop and vicinity, that he has taken the room lately occupied by **Miss Hannah C. Tilton**, next door to the Post Office, where he intends carrying on the

## TAILORING BUSINESS

in all its various branches. He has the latest London, New York and Boston Fashions as often as they appear; and no pains will be spared to satisfy those who may favor him with their custom, which will be faithfully done in the neatest manner and most approved style, and warranted to fit the person and suit the fancy of customers.

Cutting carefully attended to.

**JAMES DEALY.**

Winthrop, July 22, 1834.

## NOTICE.

**THE** subscriber having located himself in Winthrop Village, intends carrying on the **COOPERING BUSINESS** in its various branches—he flatters himself that he will give entire satisfaction to all who may favor him with their custom.

## HEZ'N HUTCHINS.

**N. B. WANTED TO PURCHASE**, White Ash and Oak bbl. Staves and Heading, Hoop Poles, and a few seasoned Pine Boards, for which a fair price will be paid.

Winthrop, July 11, 1834.

**H. H.**

**FOR SALE**—A few dozen Scyth Sticks, cheaper than ever, by **S. WEBB**, at his house.

## NOTICE.

**THE** inhabitants of Winthrop and vicinity are informed that Books left at the Maine Farmer office will be bound in the neatest manner.

## Bull Caton,

**FOR** sale by the Agent of Israel Thorndike, Esq. of Boston, at his Farm in Jackson, County of Waldo.

**CATON** is a first rate full blood North Devon, 2 1/2 years old, of a beautiful mahogany color, and of a most perfect form and proportion. He was raised in Baltimore, and is the favorite breed of Mr Coke, the great English agriculturalist, who sent them as a present to his friend Mr Caton of Baltimore, son in law of the late Charles Carroll. Mr. Coke considers the North Devons the most valuable stock in his possession, although he has extensive herds of the various improved breeds in England. The subscriber has two bulls of the same breed, and is therefore disposed to offer **CATON** for sale at one hundred dollars in cash, approved security six months, or for his value in good Cows or Oxen.

**JOSEPH PILLSBURY, Agent.**

Jackson, May 27, 1834,

6w24



## POETRY.

## FLOWERS.

BY MRS. SIGOURNEY.

I'll tell thee a story, sweet,  
Here under this shady tree;  
If thou'lt keep it safe in thy youthful breast,  
I'll whisper the whole to thee.

I had a lover once,  
In my early sunny hours,  
A fair and fanciful youth was he,  
And he told his love in flowers.

I remember its waking sigh—  
We roam'd in a verdant spot,  
And he call'd for me a cluster bright  
Of the blue Forget-me-not.

But I was a giddy girl,  
So I toss'd it soon away,  
And gather'd the dandelion-buds,  
And the wild grape's gadding spray.

He mark'd their splendid hues  
With a sad, reproachful eye;  
For one was the symbol of thoughtless mirth,  
And the other of coquetry.

Yet he would not be baffled thus.  
So he brought for my crystal vase  
The rose geranium's tender bloom,  
And the blushing hawthorn's grace.

And a brilliant and fresh bouquet  
Of the moss-rose buds he bore—  
Whose eloquent brows, in the dew-drops pearl'd,  
Were rich in the heart's deep lore.

I would not refuse the gift,  
Though I knew the spell it wove,  
But gave him back a snow-white bud,  
"Too young, too young to love."

Then he proffer'd a myrtle wreath,  
With damask-roses fair;  
And he took the liberty—only think—  
To arrange it in my hair.

And he press'd in my yielding hand  
The everlasting pea,  
Whose questioning lips of perfume breath,  
"Wilt go, wilt go with me?"

Yet we were but children still;  
And our love, though it seem'd so sweet,  
Was well expressed by the types it chose,  
For it pass'd away as fleet.

Though he brought me laurus leaf,  
That changes but to die,  
And the amaranth and the evergreen,  
Yet what did they signify?

Oft o'er his vaunted love  
Suspicious moods had power;  
So I put a French marigold in his hat,  
That gaudy, jealous flower.

But the rootless passion shrank  
Like Jonah's gourd away,  
Till the shriving ice-plant best might mark  
The grades of its chill decay.

And he sail'd o'er the faithless sea,  
To a brighter clime than ours;  
So it faded, that fond and fickle love,  
Like its alphabet of flowers.

## MISCELLANY.

## NEGLECT OF NATURAL SCIENCE.

Man is the minister and interpreter of Nature. This was the definition of an eminent philosopher; and although it might be correct as applied to himself, yet when considered in reference to the vast majority of the human race, it is wholly without meaning. How very few, even in this day of intellectual light, are acquainted with the elementary principles of the several branches of the Science of Nature! Every person, indeed, by the necessities of ordinary life, has his attention so strongly fixed upon the contracted surface of his particular interests, that he is prevented from observing, with an eye of intelligence, the phenomenon of life that daily passes before him. Generations successively come forward, almost wholly ignorant of what has preceded them, and entirely destitute of the means of knowing what is to follow them.

Of this age it will be recorded, that two thirds of its inhabitants lived and perished in the thick darkness of heathen ignorance; that

War, and Crime, and Misery had their untold victims, even in those climes which were illuminated by the light of civilization.

To come down to our own community, confessedly equal in point of intelligence and virtue to any in the world, how many there are who are utterly ignorant of themselves; of the economy of nature; of even the principle of the government under which they live. How few among us endeavor to think justly and act wisely upon these points! Wavering, uncertain and fickle as water, the majority are ready to embrace or to renounce any doctrine, or to adopt any expedient that has only self for its object. Although, like the Egyptian idolaters, they have not erected temples for the worship of bulls and crocodiles, yet the gods of their worship are not less absurd and unavailing.—The phantoms, Ambition and Wealth, glitter in their fancy with the sunbeams of happiness, and they pursue and worship them with breathless ardor. Baffled and disappointed, they nevertheless urge onward, plotting and counterplotting, and though many faint in the race, and are crushed, and are given over to misanthropy and remorse, yet neither sharp Experience nor sober Philosophy can persuade them to forsake the impalpable delusions they madly worship. Hence, we see among us, hungry competitors for the paltry distinctions of an hour; hence, trucklers for popularity; hence, usurers and misers; hence, distrust, discord, jealousy, and embittered rivalry, ill concealed under a seeming courtesy of demeanor. Indolence, too, is a god that hath its worshippers. Encrusted with a love of ease, and with souls mildewed by indifference and contempt of the gifts of God, its votaries float lazily along, unstirred by one healthy influence, until they sink into the lake of Death, a libel upon their species.

The Science of Nature should engage man's earnest and unwearied study; for it emphatically addresses itself to his understanding, his feelings and his necessities. It forms the most comprehensive and interesting object of human inquiry. It opens to contemplation a countless number of objects, material and intellectual, and the diversified relations and affinities that subsist between them. It is the golden key that opens the way to surpassing beauty, utility, and never-cloying, never-ending delight.

"In the study of nature," says an eloquent naturalist, "we tread in the footsteps of wisdom. We listen to a voice, which is the same yesterday, to-day and forever. And while the erring and fluctuating opinions of man, his crimes, his follies, his power, pass away and are forgotten, the empire of nature is immutable, to us eternal—the knowledge of nature which is once accurate is forever true—the knowledge of nature which is once perfect, may be forever useful.

*Bush's Horticultural Address.*

**Awful Calculation.**—An ingenious authentic, and valuable statistical work, published a few years since, states that the number of inhabitants who have lived on the earth amount to about 36,627,843,275,846. The sum, the writer says, when divided by 3,096,000, the number of square leagues of land on this surface of the globe, leaves 11,820,698,732 persons to each square league. There are 27,864,000 square miles of land, which, being divided as above, gives about 1,314,522,076 persons to each square mile. Let the mile be reduced to square rods, and the number he says will be 1,853,500,000, which being divided as above, gives 1,283 inhabitants to each square rod, which rod, being reduced to feet and divided as above, will give about five persons to each square foot of terra firma on the globe. Let the earth be supposed to be one vast burying ground, and according to the above statement, there will be 1,283 persons to be buried on each square rod, capable of being

divided into twelve graves: it appears that each grave contained 100 persons, and the whole earth has been one hundred times dug over to bury its inhabitants—supposing they had been equally distributed! What an awful, overwhelming thought! What a lesson to the infatuated being who has centered all his hopes and affections upon the evanescent pleasure of this truly transitory life!

**SPONGE.**—This well known marine production has been in use from very early times, and naturalists were long embarrassed whether to assign it a place in the animal or vegetable kingdom. Most authorities now agree in putting the sponges in the lowest scale of animal life. There are about fifty different species of sponges, of which nine or ten belong to this country. They are found in the Mediterranean and those seas in warm and temperate latitudes, diminishing in number and becoming of inferior quality on the approach to cold regions. They adhere to rocks in places the least exposed to the action of currents and waves, which the ebbing tide does not leave uncovered. The best sponges known to us are those which come from the Archipelago, where they abound near many of the islands, whose inhabitants may be said to subsist by the sponge-fishery, if we may so call it.—At the Cyclades, for instance, sponge-diving forms the chief employment of the population. The sea is at all times extremely clear, and the experienced divers are capable of distinguishing from the surface the points to which the sponge is attached below, when an unpracticed eye could but dimly discern the bottom. Each boat is furnished with a large stone attached to a rope, and this the diver seizes in his hand on plunging head foremost from the stern. He does this in order to increase the velocity of his descent; thus economizing his stock of breath, as well as to facilitate his ascent when exhausted at the bottom, being then quickly hauled up by his companions. Few men can remain longer than about two minutes below; and, as the process of detaching the sponge is very tedious, three, and sometimes four divers descend successively to secure a particularly fine specimen.

The best sponge is that which is the palest and lightest, has small holes, and is soft to the touch. By the old physicians, sponge was regarded as a cure for a long list of maladies; this last is now much abridged, though burned sponge, in which form only it is used, still has a place in the materia medica.—[*Penny Magazine.*]

**SCRAPS OF HISTORY.**—In the reign of Henry VIII, there did not grow in England any vegetable or eatable root, such as carrots, parsnips, cabbage, &c. Turkeys, fowls, &c. were introduced there about the year 1524. The currant shrub was brought from the Island of Zante, A. D. 1553.—Pocket watches were brought there from Germany, A. D. 1577. About the year 1580, coaches were introduced. A saw mill was erected near London in 1633, but afterwards demolished, that it might not deprive the laboring poor of employment. Tea was introduced into England in 1666, and soon became a fashionable drink: it sold then for 60s. per lb. It was boiled in a large iron pot until it was tender, and was then sauced with butter, and served up in a large deep dish.

**THE EYE.**—A beautiful eye makes silence eloquent, a kind eye makes contradiction an assent, an enraged eye makes beauty deformed. The eye speaks a language in which there can be no deceit, nor can a skilful observer be imposed upon by looks, even among politicians or courtiers.

## PLOUGHS.

Of the first quality kept constantly on hand by  
HORACE GOULD.  
Winthrop, May 8, 1834

## Woollen Cloth

### MANUFACTURED.

THE subscriber would inform the Farmers and the public in general, that he will manufacture Felled Cloth for 33 cents per yard, and finish it in the best workmanlike manner—Colored various colors. Pressed Cloth, 20 cents do.—Blankets, 17 cents do., finished in the English style—Flannels, 15 cents do., at the

### SEBATTAS MANUFACTURING ESTABLISHMENT IN LISBON.

With new and improved machinery, and experienced workmen, it is believed that we can manufacture the most Cloth from one pound of Wool, and in the best style, of any persons engaged in this branch of business. No pains will be spared to give satisfaction. A discount will be made on large lots of Wool. All communications by mail, or otherwise, will be punctually attended to.

Farmers who have Wool to sell, will please take notice.  
SYLVANUS LING.

Lisbon, Me. June, 1834.

## HORSE FOR SALE.

FOR SALE, a good HORSE, 6 years old last spring; well broke and kind in any harness, and will be a valuable horse for a farmer. He will be sold at a bargain for cash or approved credit. Enquire at this office.